Technical Safety Authority of Saskatchewan

2202 2nd Avenue
Regina, SK S4R 1K3 Canada
1 (866) 530-8599
info@tsask.ca
www.tsask.ca

REGISTRATION OF A PRESSURE FITTING DESIGN

09-Jun-20

TSSA
345 Carlingview Drive
Toronto, Ontario
M9W 6N9

Attention: Tanya Francis

File Number: 11525 [0 F]

Re: Manufacturer: **Circor Aerospace, Inc.**
Item: **Series 200 Check Valves**
Catalog or Drawing: **Per Scope of Registration (05-Mar-20)**

TSASK Codes and Standards Compliance has registered the design listed above in accordance with The Boiler and Pressure Vessel Act and Regulations and CSA B51. The Canadian Registration Number (CRN) is:

OC12966.53 **Expiry Date: April 29, 2030**

Please note that every fitting shall be constructed in strict accordance with the registered design.

Fitting registrations are required to be resubmitted for validation after ten (10) years from the registration date in accordance with CSA B51, Clause 4.2.1.

Should you require anything further, please do not hesitate to contact the Codes and Standards Compliance Office at your convenience.

Yours truly,

Athan Syrgiannis, P.Eng.
Codes and Standards Compliance

Remarks:
A valid quality control program must be maintained at the production facility for the fitting registration to remain valid until the expiry date.

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2202 2nd Ave.
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PH: (306)798-7112 Toll Free: (866)530-8599
FAX: (306)787-9273 Toll Free: (866)760-9255
Email: boilerpermits@tsask.ca
Website: www.tsask.ca

Statutory Declaration (Registration of Fittings)

TSK-1008

I. Declaration Information

I, RANDALL RALEY,

PRODUCT MANAGER
(company title, e.g. vice president, plant manager, chief engineer)
(must be in a position of authority in the manufacturing plant where the fitting is produced)

of: CIRCOR AEROSPACE, INC.
(name of manufacturer)

In this space, show facsimile of manufacturer's logo or trademark as it will appear on the fitting.

CIRCOR | Circle Seal Controls

located at: 2301 WARDLOW CIRCLE (Plant Address – Apt/Street) CORONA, CALIFONIA (City,Prov) 92880, U.S.A. (Postal Code)

do solemnly declare that the fittings listed hereinunder, which are subject to the ***Saskatchewan Boiler and Pressure Vessel Safety Act*** (check one)

- (●) Comply with the requirements of ASME B31.1, ASME B31.3 (title of recognized North American Standard) which specifies the dimensions, Materials of construction, pressure / temperature ratings and identification marking of the fittings, or
- ( ) Are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with _____ as supported by the attached data which identifies the dimensions, materials of construction, pressure / temperature ratings and the basis for such ratings, and the marking of the fittings for identification.

I further declare that the manufacturer of these fittings is controlled by a quality control program which has been verified by the following authority, ISO 9001 SAI GLOBAL as being suitable for the manufacturer of these fittings to the stated standard. The fittings covered by this declaration, for which I seek registration, are CATEGORY C - CHECK VALVES

In support of this application, the following information, calculations and / or test data are attached:

SCOPE OF CRN, DRAWINGS, CALCULATIONS, REPORTS

II. Declaration

DECLARED before me at _____ In the _____ of _____

this _____ day of _____, _____

_____ (print name) Randall Raley (Signature)

See attached BD 03/09/2020
(Signature of Commissioner of Oaths)

III. Office Use Only

To the best of my knowledge and belief, the application meets the requirements of the ***Boiler and Pressure Vessel Safety Act*** and CSA B51, Clause 4.2, and is accepted for registration in Category _____

_____ (Date Registered – MM DD YYYY) (For the Administrator / Chief Inspector) _____ (Expiry Date – MM DD YYYY)

Technical Safety Authority of Saskatchewan

Registration No. OC12966.53

File No. 11525

Registered

Date: June 9, 2020

Expiry Date: April 29, 2030

Codes & Standards Compliance Office

CALIFORNIA JURAT WITH AFFIANT STATEMENT **GOVERNMENT CODE § 8202**

☒ See Attached Document (Notary to cross out lines 1–6 below)
☐ See Statement Below (Lines 1–6 to be completed only by document signer[s], *not* Notary)

1
2
3
4
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6

Signature of Document Signer No. 1 *Signature of Document Signer No. 2 (if any)*

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of Riverside

Subscribed and sworn to (or affirmed) before me on this 9th day of March, 2020
Date *Month* *Year*
by
(1) Randell Raley
(and (2)),
Name(s) of Signer(s)

proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.

BROOKE MILLIGAN
Notary Public - California
Riverside County
Commission # 2259795
My Comm. Expires Sep 25, 2022

Signature Brooke Milligan
Signature of Notary Public

Seal
Place Notary Seal Above

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: STATUTORY DECLARATION Document Date: NO DATE

Number of Pages: 1 Signer(s) Other Than Named Above: NO OTHER SIGNERS

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_____ Randall Raley
(print name) (Signature)

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Date *Month* *Year*
by
(1) Randall Raley
(and (2) _____),
Name(s) of Signer(s)

proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.

BROOKE MILLIGAN
Notary Public - California
Riverside County
Commission # 2259795
My Comm. Expires Sep 25, 2022

Signature Brooke Milligan
Signature of Notary Public

Seal
Place Notary Seal Above

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CIRCOR AEROSPACE, INC.
2301 Wardlow Circle
Corona, California
92880, USA

CIRCOR | Circle Seal Controls

SCOPE OF CRN REGISTRATION

Product Description	Model	Design Code	End Connection	Size Range	Material Specifications (Note 2)	MAWP at MAWT (Note 1)	Report Number
Check Valves	Series 200-*PP	ASME B31.1, ASME B31.3	FNPT	1/8", 1/4", 3/8", 1/2", 1", 1-1/4", 1-1/2"	Type 316 SS	2200 psig at 400°F	R-1196A
					Type 303 SS	1600 psig at 400°F	
					Brass	1000 psig at 250°F	
					Aluminum T4	800 psig at 250°F	
					Aluminum T6	1200 psig at 250°F	
				2", 2-1/2"	Type 316 SS	1800 psig at 400°F	
					Type 303 SS	1300 psig at 400°F	
					Brass	800 psig at 250°F	
					Aluminum T4	700 psig at 250°F	
					Aluminum T6	1000 psig at 250°F	
Check Valves	Series 200-*BB	ASME B31.1, ASME B31.3	Tube End	1/4"	Type 316 SS	3000 psig at 400°F	R-1196B
					Type 303 SS	2500 psig at 400°F	
					Brass	1500 psig at 250°F	
					Aluminum T4	1300 psig at 250°F	
					Aluminum T6	1900 psig at 250°F	
				3/8", 5/8", 3/4", 1", 1-1/4", 1-1/2"	Type 316 SS	2200 psig at 400°F	
					Type 303 SS	1600 psig at 400°F	
					Brass	1000 psig at 250°F	
					Aluminum T4	800 psig at 250°F	
					Aluminum T6	1200 psig at 250°F	
Check Valves	Series 200-*MM	ASME B31.1, ASME B31.3	MNPT	1/4"	Type 316 SS	2200 psig at 400°F	R-1196C
					Type 303 SS	1600 psig at 400°F	
					Brass	1000 psig at 250°F	
					Aluminum T4	800 psig at 250°F	
					Aluminum T6	1200 psig at 250°F	
Check Valves	Series 200-*RR	ASME B31.1, ASME B31.3	Tube End	1/2"	Type 316 SS	2200 psig at 400°F	R-1196D
					Type 303 SS	1600 psig at 400°F	
					Brass	1000 psig at 250°F	
					Aluminum T4	800 psig at 250°F	
					Aluminum T6	1200 psig at 250°F	

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SCOPE OF CRN REGISTRATION CONTINUED

Product Description	Model	Design Code	End Connection	Size Range	Material Specifications (Note 2)	MAWP at MAWT (Note 1)	Report Number
Check Valves	Series H200-*PP	ASME B31.1, ASME B31.3	FNPT	1-1/4"	Type 316 SS	5800 psig at 400°F	R-1196E
					Type 303 SS	4200 psig at 400°F	
					Brass	2600 psig at 250°F	
					Aluminum T4	2200 psig at 250°F	
					Aluminum T6	3200 psig at 250°F	
				1-1/2"	Type 316 SS	3500 psig at 400°F	
					Type 303 SS	2500 psig at 400°F	
					Brass	1600 psig at 250°F	
					Aluminum T4	1300 psig at 250°F	
					Aluminum T6	1900 psig at 250°F	
				2"	Type 316 SS	5200 psig at 400°F	
					Type 303 SS	3700 psig at 400°F	
					Brass	2300 psig at 250°F	
					Aluminum T4	2000 psig at 250°F	
					Aluminum T6	2800 psig at 250°F	

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Note 1: MAWP = Maximum Allowable Working Pressure, MAWT = Maximum Allowable Working Temperature.

Note 2:
Type 316 SS = Stainless Steel ASTM A479-316
Type 303 SS = Stainless Steel A582-303 with a minimum yield strength of 30,000 psi and a minimum tensile strength of 75,000 psi.
Brass = Brass ASTM B16 UNS C36000. In accordance with ASME B31.1 Table A-6 Note (8) Materials shall be tested to determine the presence of residual stresses that might result in failure of individual parts due to stress corrosion cracking. Tests shall be conducted in accordance with ASTM B154 or ASTM B858. The test frequency shall be as specified in ASTM B249.
Aluminum T4 = ASTM B221 UNS A96061 T4
Aluminum T6 = ASTM B221 UNS A96061 T6

Note 3: The pressure-temperature ratings shown are the maximum CRN pressure-temperature ratings. In all cases the pressure-temperature ratings may be limited by the seat and seal materials. Please consult Circle Aerospace, Inc.

Note 4: For low temperature operation the products shall conform to the rules of the applicable codes under which they are used.

Note 5: In accordance with ASME B31.1 para. 123.1.2(D) when this product is manufactured from a ASME B31.1 unlisted material and used under he ASME B31.1 code the facility owner must accept the use of the following non listed materials.
- Stainless Steel ASTM A582-303 meeting the requirements specified in ASTM A473.